

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. BHL UTU-046 UTSLO71745	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A	
2. Name of Operator SHENANDOAH ENERGY INC.		7. If Unit or CA Agreement, Name and No. BRENNAN BOTTOM	
Contact: JOHN BUSCH E-Mail: jbusch@shenandoahenergy.com		8. Lease Name and Well No. BRENNAN BOTTOM UNIT 1HG-18-7-21	
3a. Address 11002 E. 17500 S. VERNAL, UT 84078		9. API Well No. 43-047-34565	
3b. Phone No. (include area code) Ph: 435.781.4341 Fx: 435.781.4323		10. Field and Pool, or Exploratory BRENNAN BOTTOM	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 702FNL 691FEL 4452548 40.21648 FSL 619877 -109.59122 At proposed prod. zone SWSE 660FNL 1500FEL 4451354 40.20595 619675 -109.59382		11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T7S R21E Mer SLB	
14. Distance in miles and direction from nearest town or post office* 16 +/- MILES NORHTWEST OF REDWASH, UTAH		12. County or Parish UINTAH	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 691' +/-		13. State UT	
16. No. of Acres in Lease 40.00		17. Spacing Unit dedicated to this well 157.26	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1800' +/-		19. Proposed Depth 10550 MD 6575 TVD	
20. BLM/BIA Bond No. on file U-0969		21. Elevations (Show whether DF, KB, RT, GL, etc.) 4717 KB	
22. Approximate date work will start		23. Estimated duration 20+ DAYS	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature John Busch	Name (Printed/Typed) JOHN BUSCH	Date 04/26/2002
Title OPERATIONS		
Approved by (Signature) Bradley G. Hill	Name (Printed/Typed) BRADLEY G. HILL	Date 06-10-02
Title	Office REGULATION SPECIALIST III	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #11095 verified by the BLM Well Information System
For SHENANDOAH ENERGY INC., will be sent to the Vernal

RECEIVED

APR 29 2002

DIVISION OF
OIL, GAS AND MINING

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T7S, R21E, S.L.B.&M.

SHENANDOAH ENERGY, INC.

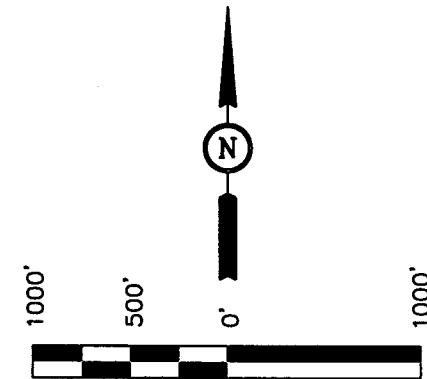
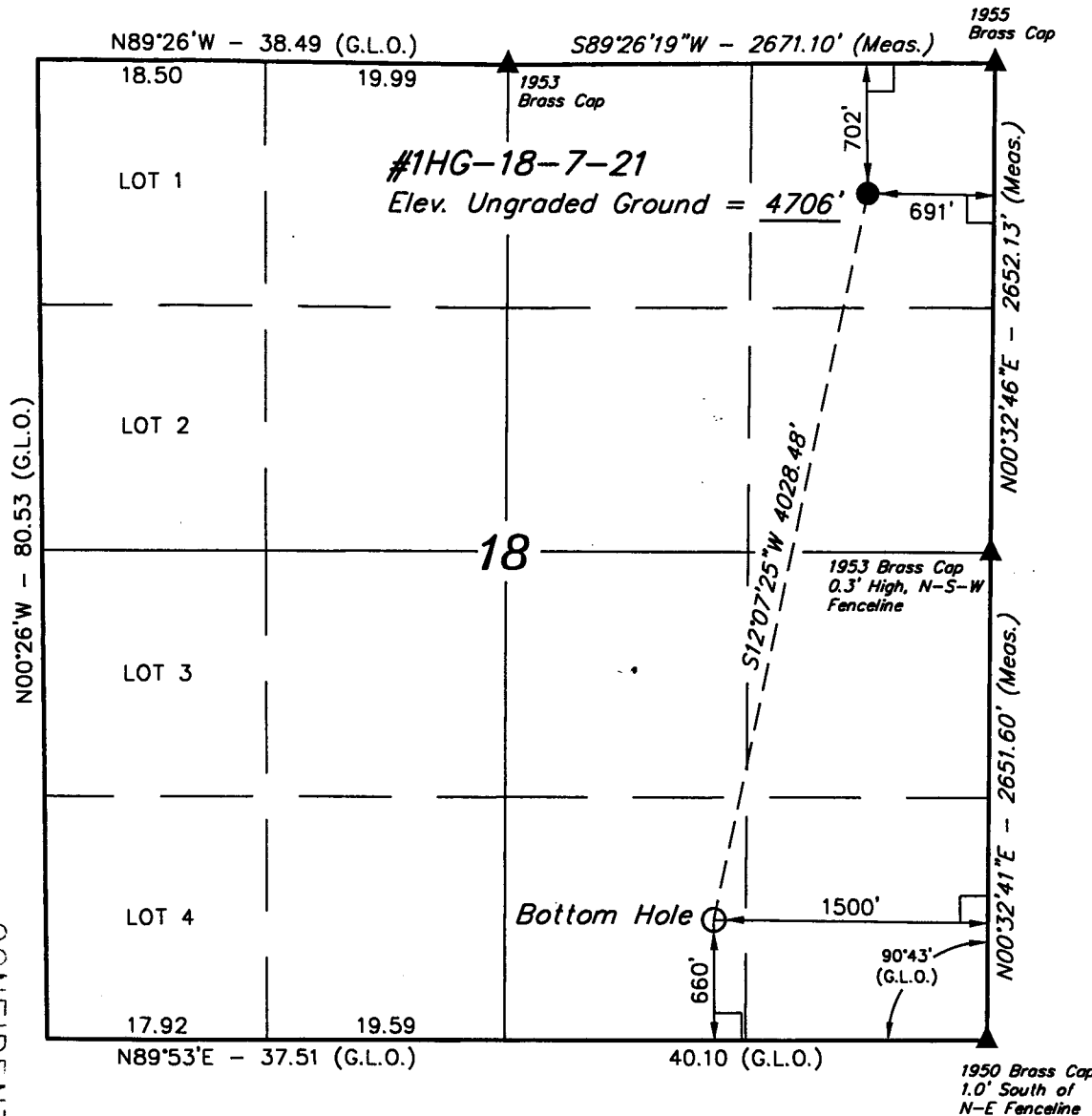
Well location, #1HG-18-7-21, located as shown in the NE 1/4 NE 1/4 of Section 18, T7S, R21E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 18, T7S, R21E, S.L.B.&M. TAKEN FROM THE BRENNAN BASIN QUADRANGLE, UTAH, UTAH COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4698 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert L. Cox
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 4-18-02 D.COX

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 4-8-02	DATE DRAWN: 4-9-02
PARTY D.A. J.A. D.COX	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE SHENANDOAH ENERGY, INC.	

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LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)

LATITUDE = 40°12'59.94" (40.216650)
LONGITUDE = 109°35'29.72" (109.591589)



Shenandoah Energy Inc.

May 6, 2002

Division of Oil, Gas & Mining
1594 W. N Temple, STE 1210
Salt Lake City, UT 84114

Attention: Lisha Cordova

Dear Lisha:

The enclosed are copies of the additional information needed to complete the BBU 1HG-18-7-21 APD. Please attach this information to your copy of the APD.

If you have any question please contact Raleen Searle at (435) 781-4309.

Thank you,

A handwritten signature in black ink, reading "Raleen Searle". The signature is written in a cursive, flowing style.

Raleen Searle
Regulatory Affairs Analyst

Enclosures

RECEIVED

MAY 08 2002

**DIVISION OF
OIL, GAS AND MINING**

ONSHORE OIL & GAS ORDER NO. 1
Shenandoah Energy Inc.
Brennan Bottom Unit 1HG-18-7-21

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

Formation	TMD	TVD
Uinta	Surface	Surface
Green River	3477'	3477'
Mahogany Ledge	4767'	4767'
Mesa	6882'	6616'
TD (Green River)	10,550'	6575'

2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	TMD	TVD
Oil	Green River	10,550'	6575'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If no flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

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DIVISION OF
OIL, GAS AND MINING

ONSHORE OIL & GAS ORDER NO. 1

Shenandoah Energy Inc.

Brennan Bottom Unit 1HG-18-7-21

DRILLING PROGRAM

3. Operator's Specification for Pressure Control Equipment:

- A. 3,000 psi W.P. Double Gate BOP or Single Gate BOP (schematic attached)
- B. Functional test daily
- C. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing whichever is less. Tests shall be done at the time of installation, prior to drilling out and weekly. All tests shall be for a period of 15 minutes

4. Casing Program

	<u>Depth</u>	<u>Hole Size</u>	<u>Csg Size</u>	<u>Type</u>	<u>Weight</u>
Surface	600'	12-1/4"	9-5/8"	K-55	36lb/ft (new)
Intermediate	6835'	8 3/4"	7"	J-55 – N-80 (First 500' & Last 500')	20-23lb/ft (new)
Production	10,550	6 1/4"	Open Hole		

5. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes
- F. The blooie line shall be at least 6" in diameter and extend at least 100' from the well bore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').

DRILLING PROGRAM

-
- H. Compressor shall be tied directly to the blooie line through a manifold.
 - I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.
6. Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

6. Testing, logging and coring program

- A. Cores – none anticipated
- B. DST – none anticipated

Logging – Mud logging – 4500 to TD
GR-SP-Induction
Neutron Density
MRI

- C. Formation and Completion Interval: Green River interval, final determination of completion will be made by analysis of logs.
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

ONSHORE OIL & GAS ORDER NO. 1

Shenandoah Energy Inc.

Brennan Bottom Unit 1HG-18-7-21

DRILLING PROGRAM

7. Cementing Program

<u>Casing</u>	<u>Volume</u>	<u>Type & Additives</u>
Surface	257 sx	Class "G" single slurry mixed to 15.6 ppg, yield = 1.19 cf/sx. Fill to surface with 160 cf (257 sx) calculated. Tail plug used. Allowed to set under pressure
Production	Lead-719 sx* Tail-90 sx*	Lead/Tail oilfield type cement circulated in place . Tail slurry: Class "G" + gilsonite and additives as required, mixed to 14.8 ppg, yield = 1.34 cf/sx. Fill to 6535' (±300' above top of Lower Green River). Cement Characteristics: Lead slurry: Class "G" + extender and additives as required, mixed to 11.0 ppg, yield = 3.82 cf/sx. Fill to surface. Tail plug used. Allowed to set under pressure.

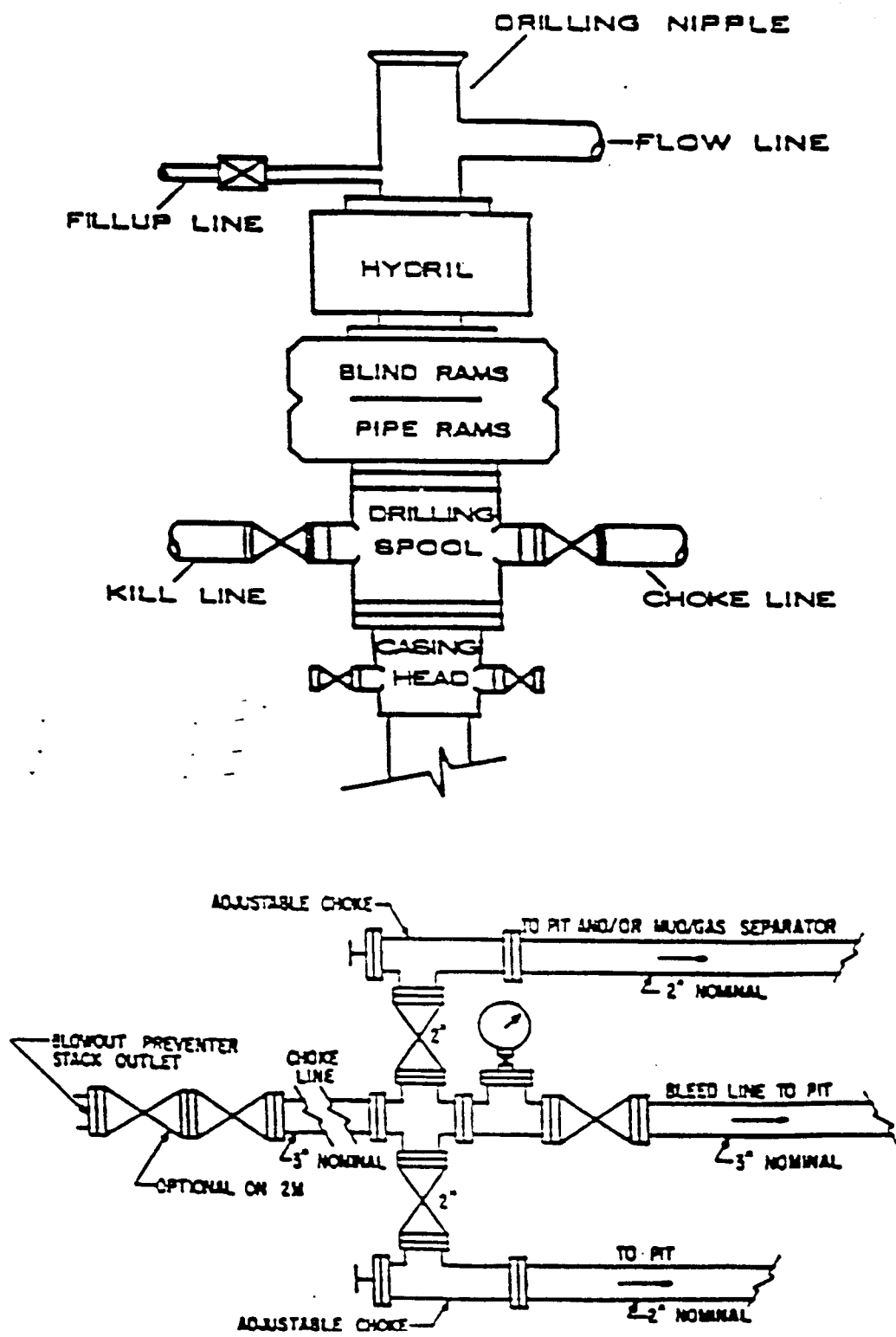
*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 2630.0 psi. Maximum anticipated bottom hole temperature is 140° F.

Drilling Program

SCHEMATIC DIAGRAM OF 3,000 PSI BOP STACK



002

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 04/29/2002

API NO. ASSIGNED: 43-047-34565

WELL NAME: BRENNAN BOTTOM 1HG-18-7-21

OPERATOR: SHENANDOAH ENERGY INC (N4235)

CONTACT: JOHN BUSCH

PHONE NUMBER: 435-781-4341

PROPOSED LOCATION:

NENE 18 070S 210E

SURFACE: 0702 FNL 0691 FEL

BOTTOM: 0660 FSL 1500 FEL

UINTAH

BRENNAN BOTTOM (560)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTSL-071745

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE:

LONGITUDE:

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]
 (No. U-0969)

☒ Potash (Y/N)

☒ Oil Shale 190-5 (B) or 190-3 or 190-13

☒ Water Permit
 (No. 43-8496)

☒ RDCC Review (Y/N)
 (Date:)

☒ Fee Surf Agreement (Y/N)

LOCATION AND SITING:

R649-2-3.

Unit BRENNAN BOTTOM

☒ R649-3-2. General ~~*Horizontal Drill~~ per YLH
 6/11/02
 Siting: 460 From Qtr/Qtr & 920' Between Wells

R649-3-3. Exception

☒ Drilling Unit

Board Cause No: 236-1

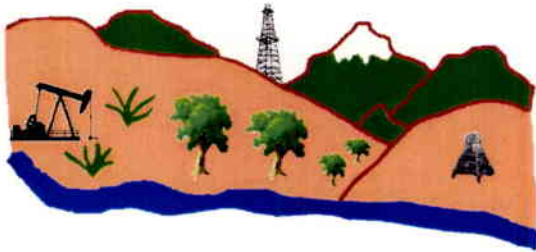
Eff Date: 6-18-96

Siting: *Does not suspend Gen. Siting

☒ R649-3-11. Directional Drill

COMMENTS: SoP, Separate file

STIPULATIONS: 1- Federal Approval



Utah Oil Gas and Mining

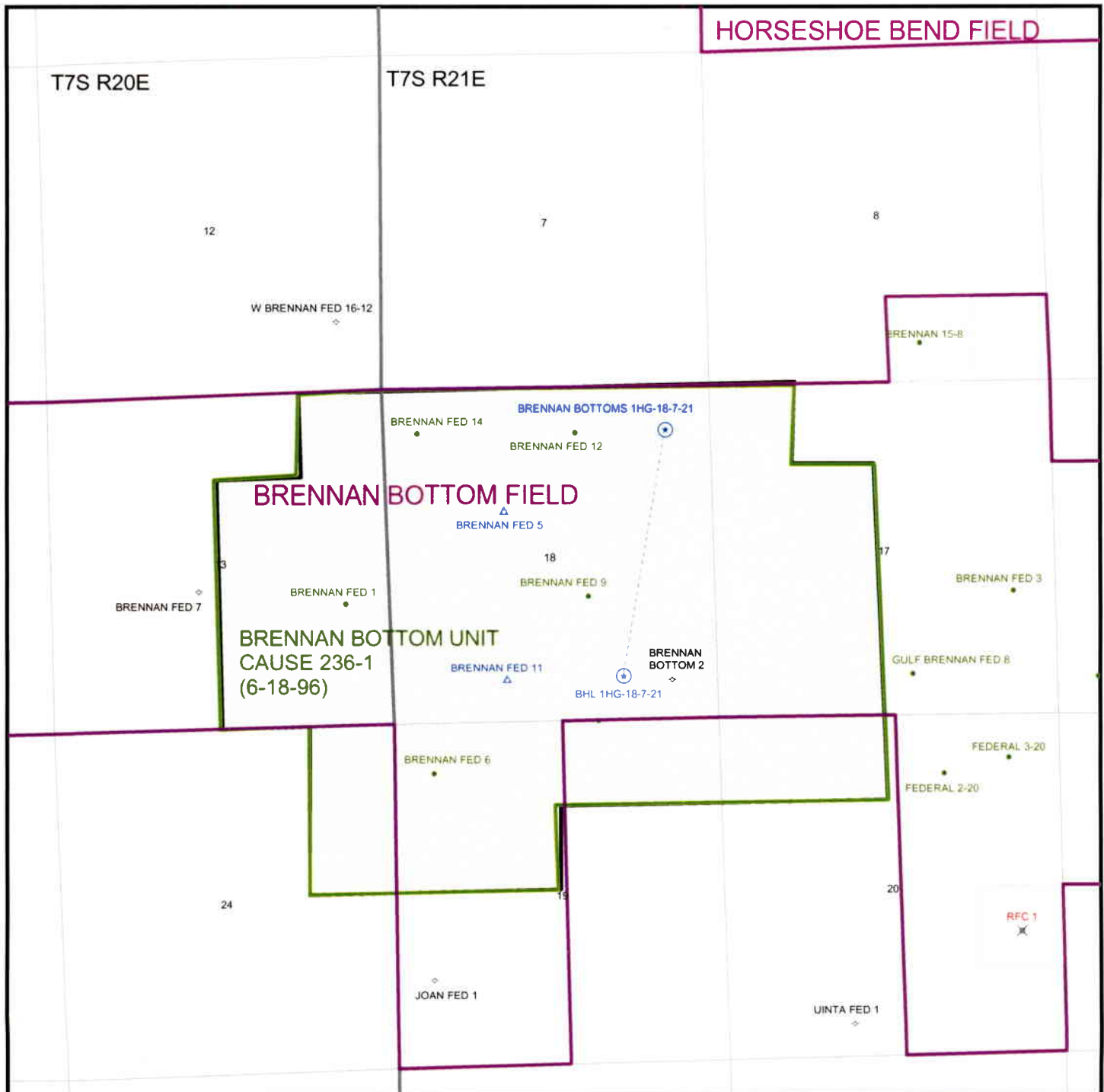
OPERATOR: SHENANDOAH ENERGY (N4235)

SEC. 18, T7S, R21E

FIELD: BRENNAN BOTTOM (560)

COUNTY: UINTAH

UNIT: BRENNAN BOTTOM
CAUSE: 236-1 & HORIZ DRL



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		CONFIDENTIAL	5. Lease Serial No. UTSL071745 BHL Lease No.
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone			6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator SHENANDOAH ENERGY INC.		Contact: JOHN BUSCH E-Mail: jbusch@shenandoahenergy.com	7. If Unit or CA Agreement, Name and No. BRENNAN BOTTOMS
3a. Address 11002 E. 17500 S. VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 435.781.4341 Fx: 435.781.4323	8. Lease Name and Well No. BRENNAN BOTTOMS UNIT 1HG-18-7-21	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE 702FNL 691FEL At proposed prod. zone SWSE 660FNL 1500FEL		9. API Well No.	
14. Distance in miles and direction from nearest town or post office* 16 +/- MILES NORHTWEST OF REDWASH, UTAH		10. Field and Pool, or Exploratory BRENNAN BOTTOM	11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T7S R21E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 691' +/-	16. No. of Acres in Lease 751.09	12. County or Parish UINTAH	13. State UT
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1800' +/-	19. Proposed Depth 10550 MD 6575 TVD	17. Spacing Unit dedicated to this well 40.00	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4717 KB	22. Approximate date work will start	20. BLM BIA Bond No. on file U-0969	
		23. Estimated duration 20+ DAYS	

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <u>John Busch</u>	Name (Printed/Typed) JOHN BUSCH	Date 04/29/2002
Title OPERATIONS		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #11095 verified by the BLM Well Information System
For SHENANDOAH ENERGY INC., will be sent to the Vernal

RECEIVED

APR 30 2002

DIVISION OF
OIL, GAS AND MINING

REVISED
Lease #

SHENANDOAH ENERGY INC.
BBU 1HG-18-7-21

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

Formation	TMD	TVD
Uinta	Surface	Surface
Green River	3477	3477
Mahogany Ledge	4767	4767
Mesa	6882	6616
TD (Green River)	10550	6575

2. Anticipated Depths of Oil, Gas, Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	TMD	TVD
Oil	Green River	10550	6575

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If no flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

3. Anticipated Bottom Hole Pressures

Maximum anticipated bottom hole pressure equals approximately 2630.0 psi.

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**SHENANDOAH ENERGY INC.
BRENNAN BOTTOMS UNIT 1HG-18-7-21
SURFACE: 702' FNL, 691' FEL
NENE, SECTION 18, T7S, R21E
PROPOSED PROD. ZONE: 660' FSL, 1500' FEL
SWSE, SECTION 18, T7S, R21E
UINTAH COUNTY, UTAH
LEASE # UTU-046**

ONSHORE ORDER NO. 1

MULTI – POINT SURFACE USE & OPERATIONS PLAN

An onsite inspection was conducted for the BBU IHG -18-7-21 on April 25, 2002 at approximately 1:20 PM. Weather conditions were sunny and partly cloudy at the time of the onsite. In attendance at the inspection were the following individuals:

Byron Tolman	Bureau of Land Management
Paul Bueller	Bureau of Land Management
Dixie Saddler	Bureau of Land Management
John Busch	Shenandoah Energy Inc.
Raleen Searle	Shenandoah Energy Inc.

1. Existing Roads:

The proposed well site is approximately 16 miles northwest of Red Wash, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

There will be no improvements made to existing access roads.

2. Planned Access Roads:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Refer to Topo Map B for the location of the proposed access road.

3. Location of Existing Wells Within a 1 – Mile Radius:

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Refer to Topo Map D for the location of the proposed pipeline.

5. Location and Type of Water Supply:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

The Fresh Water will be supplied as described in the Brennan Bottoms Field Development EA.

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6. Source of Construction Materials:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

7. Methods of Handling Waste Materials:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

8. Ancillary Facilities:

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A pit liner is required.

10. Plans for Reclamation of the Surface:

Please see Shenandoah energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Township 07 and 08 South, Ranges 21 to 24 East.

Seed mix:

Fourwing saltbush	A triplex canescens	4lbs/acre
Indian rice grass	Oryzopsis hymenoides	4lbs/acre
Shadescale	A triplex confertifolia	4lbs/acre

11. Surface Ownership:

The well pad and access road are located on lands owned by:

Bureau of Land Management
170 South 500 East
Vernal, Utah 84078
(435) 781-4400

12. Other Information

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

There is a Burrowing Owl stipulation from April 1st to August 15th. No construction will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

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Lessee's or Operator's Representative:

John Busch
Red Wash Operations Rep.
Shenandoah Energy Inc.
11002 East 17500 South
Vernal, Utah 84078
(435) 781-4341

Certification:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

Shenandoah Energy Inc. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Shenandoah Energy Inc. its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

John Busch
John Busch
Red Wash Operations Representative

26-Apr-02
Date

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Additional Operator Remarks:

Shenandoah Energy Inc. proposes to drill a well to 6575' TVD and 10550' TMD to test the Green River. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 and 24 East.

See Onshore Order No. 1 attached

Please be advised that Shenandoah Energy Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No. U-0969. The principal is Shenandoah Energy Inc. via surety as consent as provided for the 43 CFR 3104.2.

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Shenandoah Energy, Inc.

**Utah
Uintah County
Sec. 18-T7S-R21E
BBU #1HG-18-7-21
*Revised: 15 April, 2002***

PROPOSAL REPORT

15 April, 2002

sperry-sun
DRILLING SERVICES
A Halliburton Company

Proposal Ref: pro7379

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Sperry-Sun Drilling Services

Proposal Report for BBU #1HG-18-7-21

Revised: 15 April, 2002



Shenandoah Energy, Inc.
Utah

Uintah County
Sec. 18-T7S-R21E

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
6206.99	0.000	0.000	6206.99	0.00 N	0.00 E	0.00	0.000
6220.00	1.821	191.802	6220.00	0.20 S	0.04 W	0.21	14.000
6240.00	4.621	191.802	6239.96	1.30 S	0.27 W	1.33	14.000
6260.00	7.421	191.802	6259.85	3.36 S	0.70 W	3.43	14.000
6280.00	10.221	191.802	6279.61	6.36 S	1.33 W	6.49	14.000
6300.00	13.021	191.802	6299.20	10.30 S	2.15 W	10.52	14.000
6320.00	15.821	191.802	6318.57	15.18 S	3.17 W	15.50	14.000
6340.00	18.621	191.802	6337.67	20.97 S	4.38 W	21.42	14.000
6360.00	21.421	191.802	6356.46	27.67 S	5.78 W	28.27	14.000
6380.00	24.221	191.802	6374.89	35.26 S	7.37 W	36.03	14.000
6400.00	27.021	191.802	6392.92	43.73 S	9.14 W	44.67	14.000
6420.00	29.821	191.802	6410.51	53.05 S	11.08 W	54.19	14.000
6440.00	32.621	191.802	6427.61	63.19 S	13.20 W	64.56	14.000
6460.00	35.421	191.802	6444.19	74.15 S	15.49 W	75.75	14.000
6480.00	38.221	191.802	6460.20	85.88 S	17.94 W	87.73	14.000
6500.00	41.021	191.802	6475.60	98.36 S	20.55 W	100.48	14.000
6520.00	43.821	191.802	6490.36	111.57 S	23.31 W	113.97	14.000
6540.00	46.621	191.802	6504.45	125.46 S	26.21 W	128.17	14.000
6560.00	49.421	191.802	6517.83	140.01 S	29.26 W	143.04	14.000
6580.00	52.221	191.802	6530.46	155.19 S	32.43 W	158.54	14.000
6600.00	55.021	191.802	6542.32	170.95 S	35.72 W	174.64	14.000
6620.00	57.821	191.802	6553.38	187.26 S	39.13 W	191.30	14.000
6640.00	60.621	191.802	6563.62	204.07 S	42.64 W	208.48	14.000
6660.00	63.421	191.802	6573.00	221.36 S	46.25 W	226.14	14.000
6680.00	66.221	191.802	6581.51	239.08 S	49.95 W	244.24	14.000
6700.00	69.021	191.802	6589.12	257.18 S	53.74 W	262.73	14.000
6720.00	71.821	191.802	6595.82	275.62 S	57.59 W	281.57	14.000
6740.00	74.621	191.802	6601.59	294.36 S	61.51 W	300.72	14.000
6760.00	77.421	191.802	6606.43	313.36 S	65.48 W	320.12	14.000
6780.00	80.221	191.802	6610.30	332.56 S	69.49 W	339.74	14.000
6800.00	83.021	191.802	6613.22	351.93 S	73.53 W	359.53	14.000
6820.00	85.821	191.802	6615.16	371.41 S	77.61 W	379.43	14.000
6835.57	88.000	191.802	6616.00	386.62 S	80.78 W	394.97	14.000
6840.00	88.266	191.802	6616.14	390.96 S	81.69 W	399.41	6.000
6860.00	89.466	191.802	6616.54	410.53 S	85.78 W	419.40	6.000
6880.00	90.666	191.802	6616.52	430.11 S	89.87 W	439.40	6.000
6882.32	90.805	191.802	6616.49	432.38 S	90.34 W	441.72	6.000
7000.00	90.805	191.802	6614.83	547.56 S	114.41 W	559.39	0.000
7500.00	90.805	191.802	6607.81	1036.95 S	216.67 W	1059.34	0.000
8000.00	90.805	191.802	6600.79	1526.33 S	318.92 W	1559.29	0.000
8500.00	90.805	191.802	6593.76	2015.71 S	421.18 W	2059.24	0.000
9000.00	90.805	191.803	6586.74	2505.09 S	523.44 W	2559.19	0.000
9500.00	90.805	191.803	6579.72	2994.47 S	625.70 W	3059.14	0.000
10000.00	90.805	191.803	6572.69	3483.85 S	727.96 W	3559.09	0.000

Sperry-Sun Drilling Services

Proposal Report for BBU #1HG-18-7-21

Revised: 15 April, 2002



Shenandoah Energy, Inc.
Utah

Uintah County
Sec. 18-T7S-R21E

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
10500.00	90.805	191.803	6565.67	3973.23 S	830.23 W	4059.04	0.000
10547.78	90.805	191.803	6565.00	4020.00 S	840.00 W	4106.82	0.000

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet (US).
Vertical Section is from Well and calculated along an Azimuth of 191.802° (True).

Based upon Minimum Curvature type calculations, at a Measured Depth of 10547.78ft.,
The Bottom Hole Displacement is 4106.82ft., in the Direction of 191.802° (True).

Comments

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
6206.99	6206.99	0.00 N	0.00 E	Kick-Off at 6206.99ft
6521.28	6491.29	112.43 S	23.49 W	Build Rate = 14.000°/100ft
6835.57	6616.00	386.62 S	80.78 W	Continue Build at 6835.57ft
6858.94	6616.53	409.50 S	85.56 W	Build Rate = 6.000°/100ft
6882.32	6616.49	432.38 S	90.34 W	End of Build at 6882.32ft
8715.05	6590.74	2226.19 S	465.16 W	Hold Angle at 90.805 Degrees
10547.78	6565.00	4020.00 S	840.00 W	Total Depth at 10547.78ft

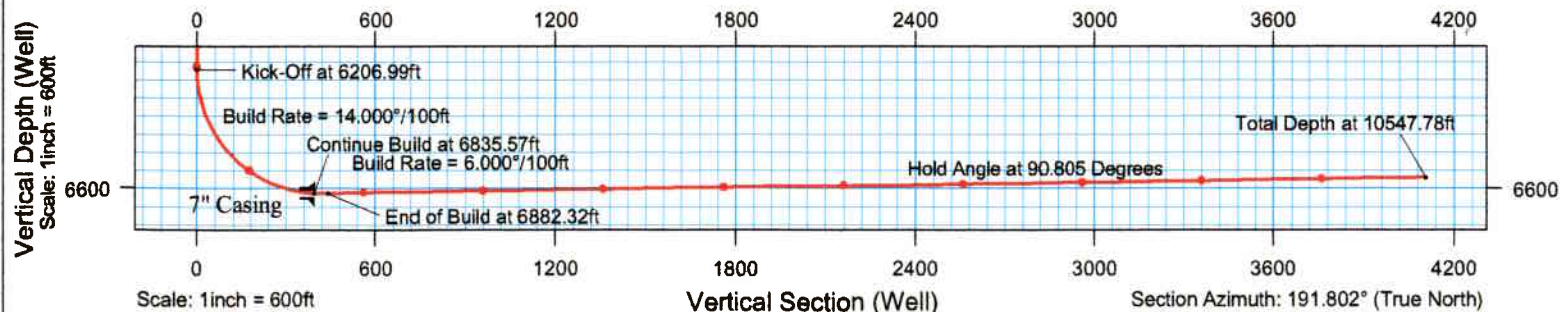
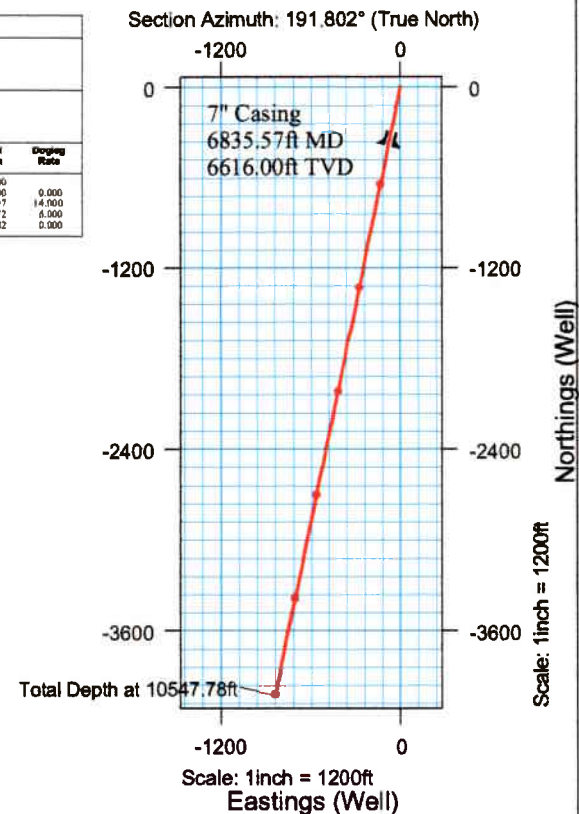
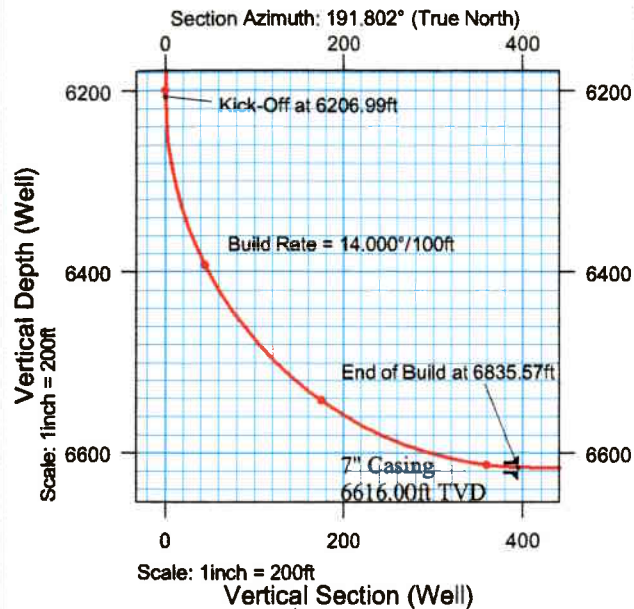
Casing details

From		To		Casing Detail
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	
<Surface>	<Surface>	600.00	600.00	9 5/8" Casing
<Surface>	<Surface>	6835.57	6616.00	7" Casing

CONFIDENTIAL

**Utah
Uintah County
Sec. 18-T7S-R21E
BBU #1HG-18-7-21**

Proposal Data for BBU #1HG-18-7-21							
Vertical Origin:		Well					
Horizontal Origin:		Well					
Measurement Units:		ft					
North Reference:		True North					
Dogleg severity:		Degrees per 100 feet (US)					
Vertical Section Azimuth:		191.802°					
Vertical Section Description:		Well					
Vertical Section Origin:		0.00 N, 0.00 E					
Measured Depth	Int.	Adm.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
0.00	0.000	1.222	0.00	0.00 N	0.00 E	0.00	
6206.99	0.000	1.222	6206.99	0.00 N	0.00 E	0.00	
6835.57	68.000	191.802	6835.57	386.62 S	80.78 W	394.97	14.000
6882.32	90.805	191.802	6882.32	432.38 S	90.34 W	441.72	6.000
10547.78	90.805	191.802	10547.78	4020.00 S	840.00 W	4106.82	0.000



Prepared by: Jay Lantz Date/Time: 15 April, 2002 - 11:41 Checked: Approved:

SHENANDOAH ENERGY, INC.

#1HG-18-7-21

LOCATED IN UINTAH COUNTY, UTAH
SECTION 18, T7S, R21E, S.L.B.&M.

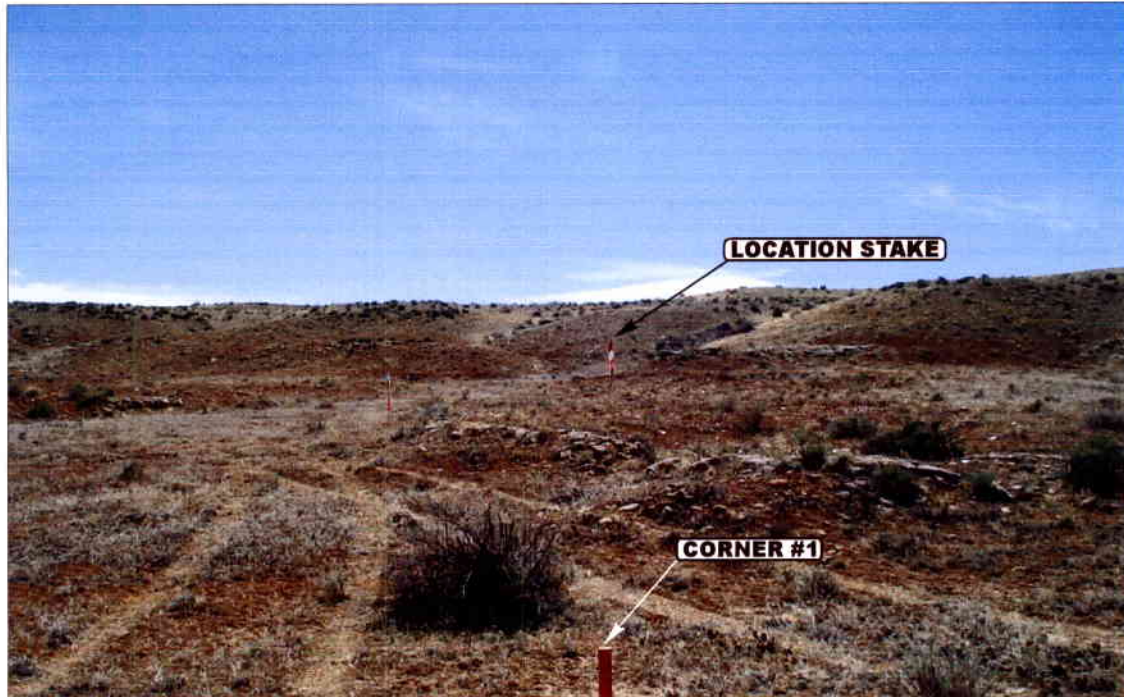


PHOTO: VIEW FROM CORNER #1 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

4 11 02
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

DRAWN BY: J.L.G.

REVISED: 00-00-00

CONFIDENTIAL

LOCATION LAYOUT FOR
#1HG-18-7-21
SECTION 18, T7S, R21E, S.L.B.&M.
702' FNL 691' FEL



Elev. Ungraded Ground At Loc. Stake = 4706.1'
FINISHED GRADE ELEV. AT LOC. STAKE = 4702.8'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

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SHENANDOAH ENERGY, INC.

TYPICAL CROSS SECTIONS FOR

#1HG-18-7-21

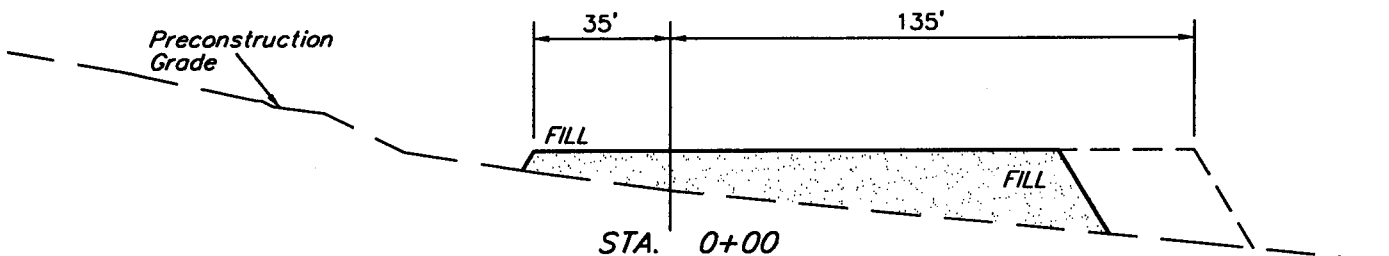
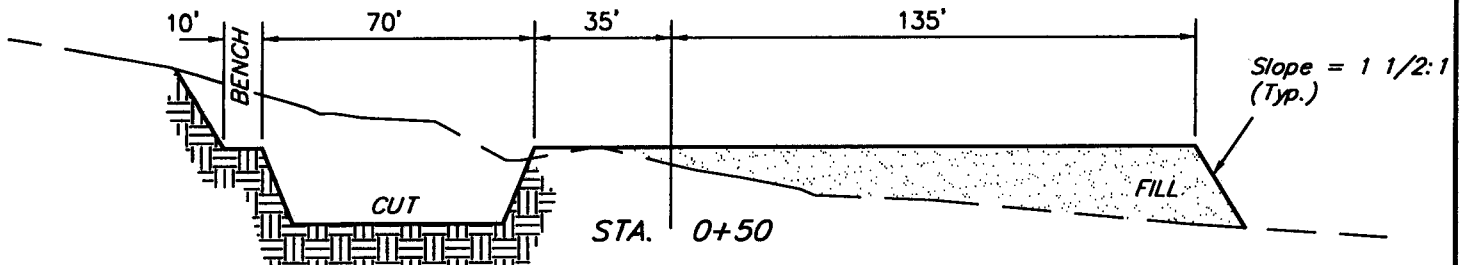
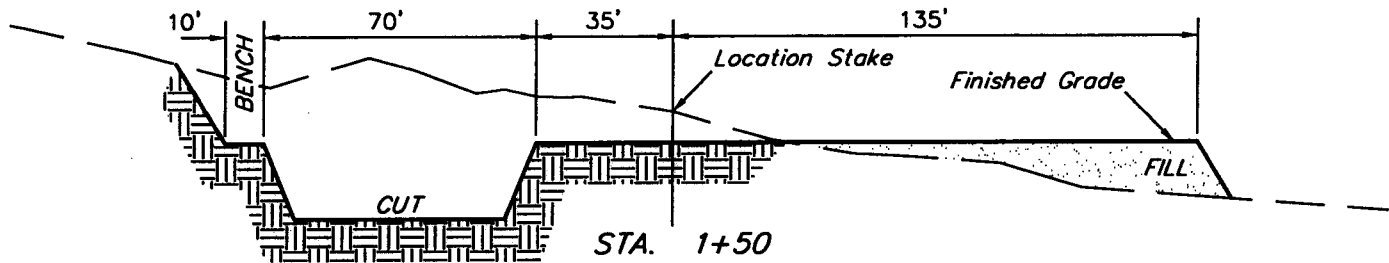
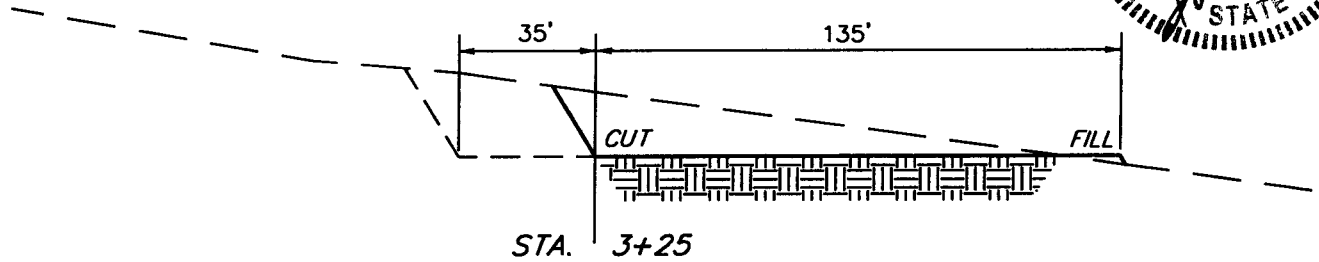
SECTION 18, T7S, R21E, S.L.B.&M.

702' FNL 691' FEL

FIGURE #2



1" = 20'
X-Section Scale
1" = 50'
DATE: 04-09-02
Drawn By: D.COX



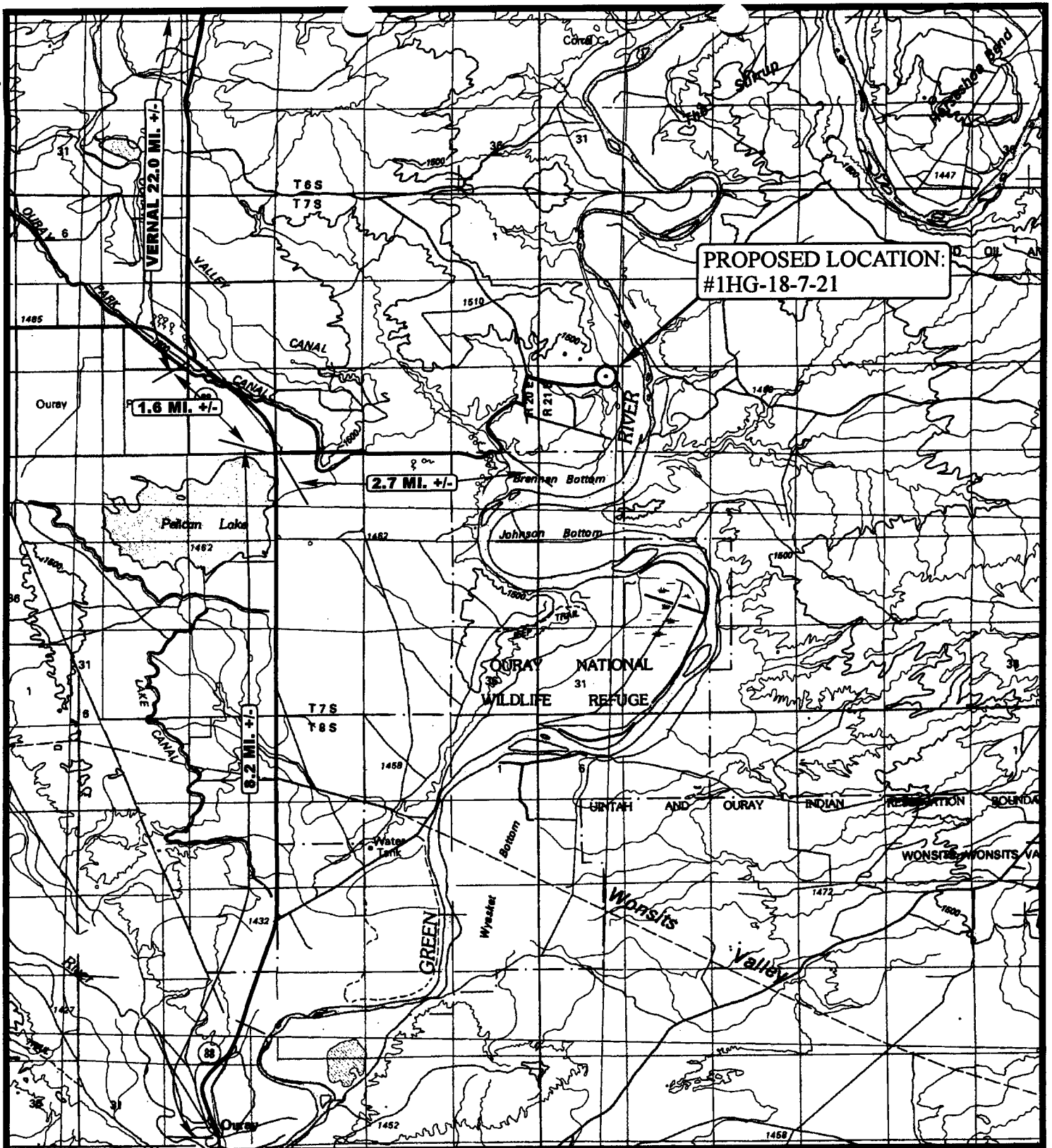
APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,260 Cu. Yds.
Remaining Location	= 7,190 Cu. Yds.
TOTAL CUT	= 8,450 CU.YDS.
FILL	= 5,720 CU.YDS.

EXCESS MATERIAL AFTER 5% COMPACTION	= 2,430 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,430 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

CONFIDENTIAL



LEGEND:

⊙ PROPOSED LOCATION



SHENANDOAH ENERGY, INC.

#1HG-18-7-21

SECTION 18, T7S, R21E, S.L.B.&M.
702' FNL 691' FEL



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

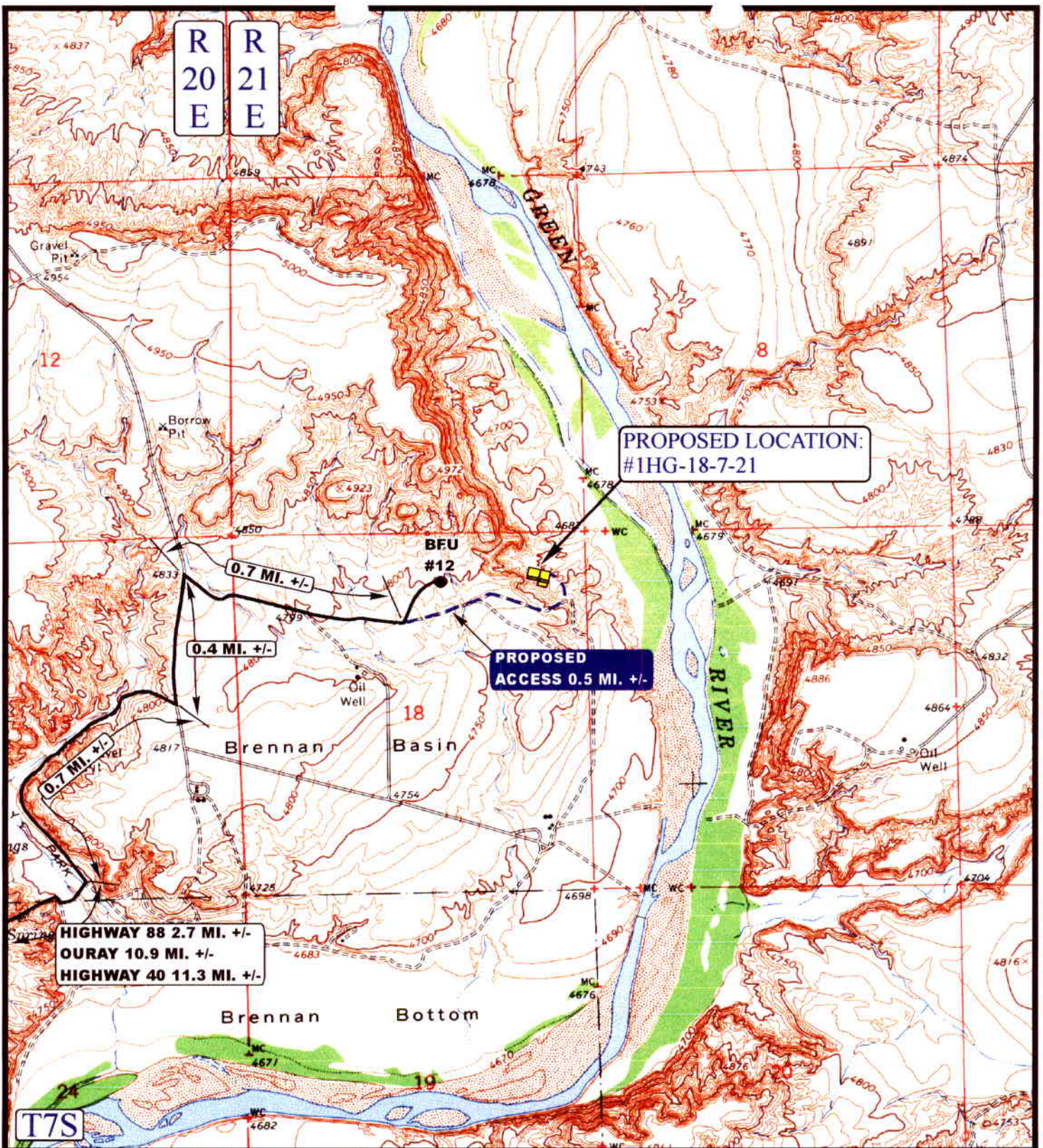
TOPOGRAPHIC
MAP

4 11 02
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: J.L.G. REVISED: 00-00-00



CONFIDENTIAL



LEGEND:

--- PROPOSED ACCESS ROAD
 — EXISTING ROAD

SHENANDOAH ENERGY, INC.

#1HG-18-7-21

SECTION 18, T7S, R21E, S.L.B.&M.

702' FNL 691' FEL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC
 MAP

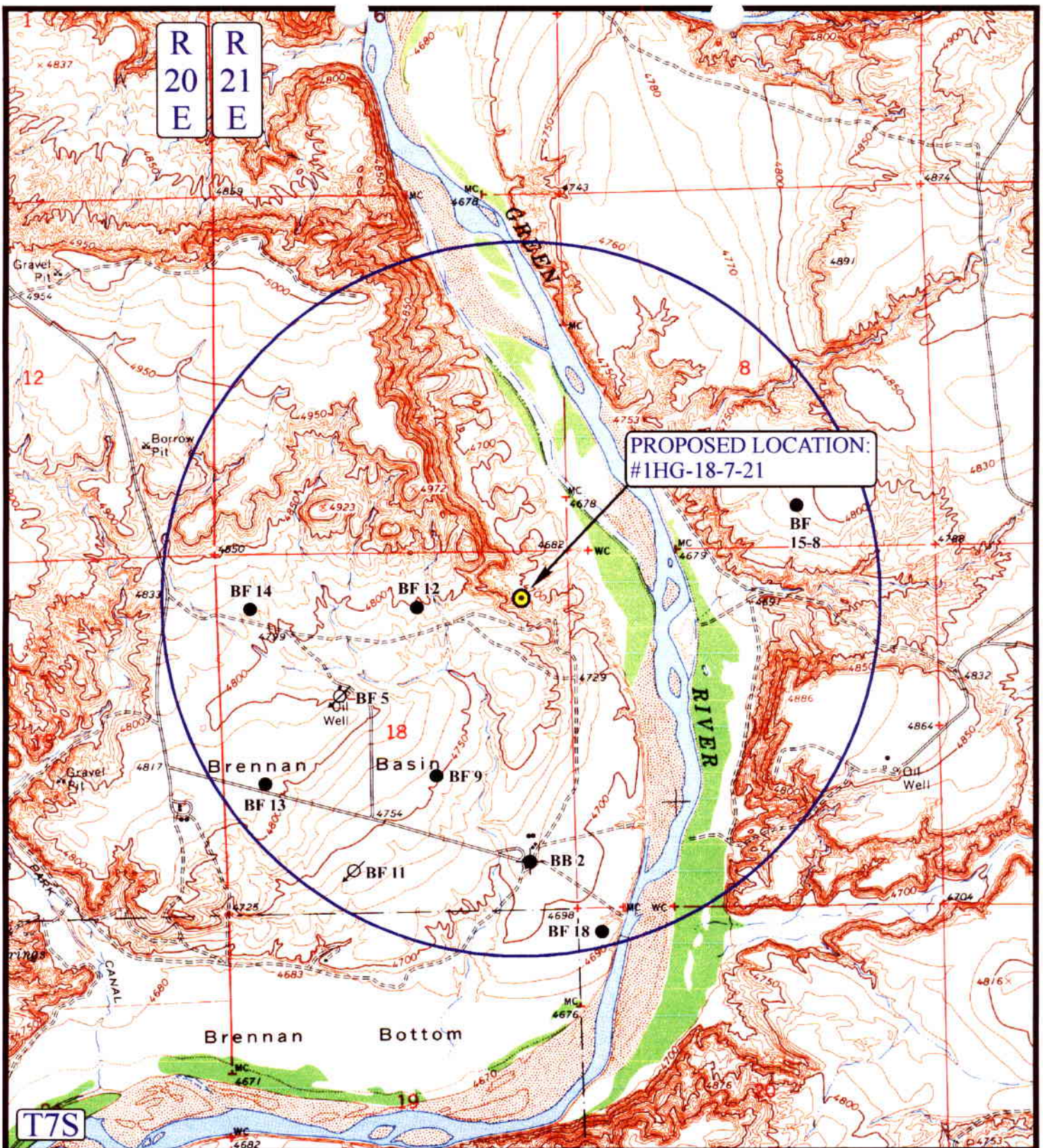
4 11 02
 MONTH DAY YEAR

SCALE: 1" = 2000'

DRAWN BY: J.L.G.

REVISED: 5-14-02

B
 TOPO



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

SHENANDOAH ENERGY, INC.

#1HG-18-7-21

SECTION 18, T7S, R21E, S.L.B.&M.

702' FNL 691' FEL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

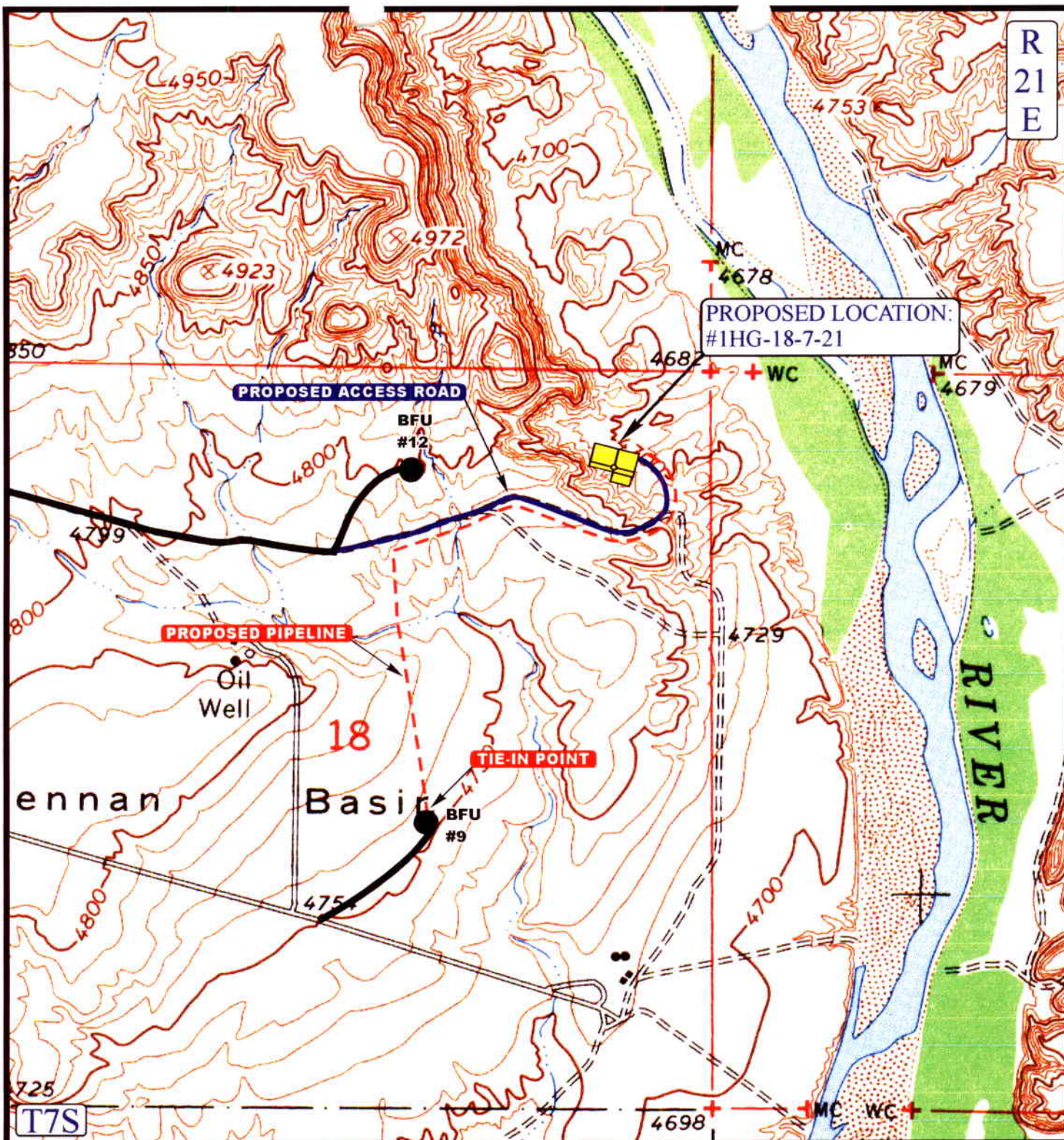


TOPOGRAPHIC
 MAP

4 11 02
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 5-14-02





APPROXIMATE TOTAL PIPELINE DISTANCE = 4400' +/-

LEGEND:

- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED ACCESS

SHENANDOAH ENERGY, INC.

#1HG-18-7-21

SECTION 18, T7S, R21E, S.L.B.&M.

702' FNL 691' FEL



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



**TOPOGRAPHIC
MAP**

4 11 02
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: J.L.G. REVISED: 5-14-02

D
TOPO

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

May 3, 2002

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2002 Plan of Development Brennan Bottom Unit,
Uintah County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is planned for calendar year 2002 within the Brennan Bottom Unit, Uintah County, Utah.

Api Number	Well	Location
------------	------	----------

(Proposed PZ Green River)

43-047-34565	1HG-18-7-21 Sec. 18, T7S, R21E	0702 FNL 0691 FEL BHL 0660 FSL 1500 FEL
--------------	--------------------------------	--

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Brennan Bottom Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:5-3-02

RECEIVED

MAY 06 2002

**DIVISION OF
OIL, GAS AND MINING**

SHENANDOAH ENERGY INC.

11002 East 17500 South
Vernal, UT 84078
Phone: (435) 781-4300
Fax (435) 781-4329

June 5, 2002

Division of Oil, Gas & Mining
1594 W. N. Temple STE 1210
Salt Lake City, UT 84114-5801

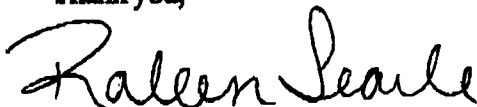
To Whom It May Concern:

In the absence of special orders of the Board, no portion of the horizontal interval within the potentially productive formation shall be closer than six hundred-sixty (660) feet to a drilling or spacing unit boundary, federally unitized area boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well. Please refer to the Oil and Gas Conservation General rule R649-3-2.3.

Shenandoah Energy Inc. Brennan Bottoms Unit 1HG-18-7-21 complies with this rule. This lease # (UTSL-071745) is under Brennan Bottoms Unit Agreement and all owners are committed under the Unit Agreement.

If you have any question please contact Raleen Searle @ (435) 781-4309.

Thank you,



Raleen Searle
Regulatory Affairs Analyst

Revised

RECEIVED

JUN 06 2002

DIVISION OF
OIL, GAS AND MINING

003



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

June 10, 2002

Shenandoah Energy Inc.
11002 E 17500 S
Vernal, UT 84078

Re: Brennan Bottom 1HG-18-7-21 Well, Surface Location 702' FNL, 691' FEL, NE NE, Sec. 18, T. 7 South, R. 21 East, Bottom Location 660' FSL, 1500' FEL, SW SE, Sec. 18, T. 7 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34565.

Sincerely,

for

John R. Baza
Associate Director

pb

Enclosures

cc: Uintah County Assessor
Bureau of Land Management, Moab District Office

Operator: Shenandoah Energy Inc.
Well Name & Number Brennan Bottom 1HG-18-7-21
API Number: 43-047-34565
Lease: Surface UTU-046; Bottom Hole UTSL-071745

Surface Location: NE NE **Sec.** 18 **T.** 7 South **R.** 21 East
Bottom Location: SW SE **Sec.** 18 **T.** 7 South **R.** 21 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal District Office
170 South 500 East
Vernal, Utah 84078-2799

Phone: (435) 781-4400
Fax: (435) 781-4410

IN REPLY REFER TO:

3160
UT08300

June 13, 2002

Shenandoah Energy Inc.
ATTN: John Busch
11002 East 17500 South
Vernal, Utah 84078

RE: Application for Permit to Drill
Well No. 1HG-18-7-21
Brennan Bottoms Unit
Lease No. UTUSL-071745 & U-046

Dear John:

Enclosed are two approved copies for the above referenced well.

If you have any questions concerning APD processing, please let me know.

Sincerely,

Pat Sutton
Legal Instruments Examiner

Enclosures

Form Approved
(August 1990)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
ONR No. 100-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		CONFIDENTIAL		5. Lease Serial No. UTSL071745
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone				6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator SHENANDOAH ENERGY INC.		Contact: JOHN BUSCH E-Mail: jbusch@shenandoahenergy.com		7. If Unit or CA Agreement Name and No. BRENNAN BOTTOMS
3a. Address 11002 S. 17500 S. VERNAL, UT 84078		3b. Phone No. (include area code) Ph: 435.781.4341 Fx: 435.781.4323		8. Lease Name and Well No. BRENNAN BOTTOMS UNIT 1HG-18-7-21
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NENE 702FNL 691FEL At proposed production zone SWSE 660FNL 1500FEL				9. API Well No.
14. Distance in miles and direction from nearest town or post office 16 1/4 MILES NORTHWEST OF REDWASH, UTAH				10. Field and Pool, or Exploratory BRENNAN BOTTOM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest prop. unit line, if any) 691' +/-		16. No. of Acres in Lease 751.06		11. Sec., T., R., M., or Blk. and Survey or Area Sec 18 T7S R21E Mer SLB
18. Distance from proposed location to nearest well, drilling, completion, applied for, on this lease, ft. 1800' +/-		19. Proposed Depth 10550 MD 6575 TVD		12. Country or Parish UINTAH
21. Elevations Show whether DF, KB, RT, GL, etc. 4717 KB		22. Approximate date work will start		13. State UT
		20. SLM/BLA Bond No. on file U-0969		17. Spacing Unit dedicated to this well 40.00
		23. Estimated duration 20+ DAYS		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plan certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SLUP shall be filed with the appropriate Forest Service Office).
- Bond to cover the operator as unless covered by an existing bond on file (see item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed Typed) JOHN BUSCH	Date 04/29/2002
Title OPERATIONS		
Approved by (Signature) 	Name (Printed Typed)	Date 06/11/2002
Title Assistant Field Manager	Office	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the sub-surface upon which a rule entitles the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 48 U.S.C. Section 1361 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

JUN 17 2002

DIVISION OF
OIL, GAS AND MININGElectronic Submission #11095 verified by the SLM Well Information System
For SHENANDOAH ENERGY INC., will be sent to the Vernal

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

REVISED

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Shenandoah Energy Inc.

Well Name & Number: Brennan Bottoms 11HG-18-7-21

API Number: 43-047-34565

Lease Number: U-406, UTSL-071745

Location: NENE Sec. 18 T.7S R.21E

Agreement: Brennan Bottoms Unit

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

Casing Program and Auxiliary Equipment

As a minimum requirement, the cement behind the intermediate casing must extend 200' above the top of the Green River formation identified at $\pm 3530'$.

Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

Other Information

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Ed Forsman (435) 828-7874
Petroleum Engineer

Kirk Fleetwood (435) 828-7875
Petroleum Engineer

BLM FAX Machine (435) 781-4410

CONDITIONS OF APPROVAL
FOR THE SURFACE USE PROGRAM OF THE
APPLICATION FOR PERMIT TO DRILL

- Burrowing Owl Stipulation, No construction or drilling from April 1- Aug. 15
- Construction of water diversion dam on SW corner of location to divert runoff around pad



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO
UT-922

June 9, 2003

QEP Uinta Basin, Inc.
1050 17th Street, Suite 500
Denver, Colorado 80265

Re: Brennan Bottom Unit
Uintah County, Utah

Gentlemen:

On May 30, 2003, we received an indenture dated February 1, 2003, whereby Shenandoah Energy, Inc. changed its name and QEP Uinta Basin, Inc. was designated as Successor Unit Operator for the Brennan Bottom Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective June 9, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Brennan Bottom Unit Agreement.

Your nationwide (Eastern States) oil and gas bond No. B000024 will be used to cover all operations within the Brennan Bottom Unit.

It is requested that you notify all interested parties of the name change of unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)
SITLA
Division of Oil, Gas & Mining
Minerals Adjudication Group
File – Brennan Bottom Unit (w/enclosure)
Agr. Sec. Chron
Fluid Chron

UT922:TAThompson:tt:6/9/03

SEI (N4235) to QEP (N2460)

well_name	Sec	T	R	api DOGM	Entity		type	stat		unit_name
BRENNAN BOTTOM 1HG-	18	070S	210E	4304734565		Federal	OW	APD	C	BRENNAN BOTT
OU GB 1G-19-8-22	19	080S	220E	4304734696	13727	Federal	OW	DRL	C	GLEN BENCH EN
STIRRUP U 8W-34-7-21	34	070S	210E	4304734707		Federal	GW	APD	C	STIRRUP

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

005

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

CONFIDENTIAL

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTSL071745
2. Name of Operator <u>SHENANDOAH QEP - UINTA BASIN INC. ENERGY INC</u> Contact: <u>RALEEN SEARLE</u> E-Mail: <u>raleen.searle@questar.com</u>		6. If Indian, Allottee or Tribe Name
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 435.781.4309 Fx: 435.781.4329	7. If Unit or CA/Agreement, Name and/or No. BRENNAN BOTTOM
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T7S R21E NENE 702FNL 691FEL		8. Well Name and No. BRENNAN BOTTOM 1HG-18-7-21
		9. API Well No. 43-047-34565
		10. Field and Pool, or Exploratory BRENNAN BOTTOM
		11. County or Parish, and State UINTAH COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QEP - Uinta Basin Inc. hereby requests an one year extension on the BB 1HG-18-7-21.

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: 07-01-03
By: [Signature]

COPY SENT TO OPERATOR
Date: 07-03-03
Initials: CND

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #23724 verified by the BLM Well Information System
For QEP - UINTA BASIN INC, sent to the Vernal

Name (Printed/Typed) RALEEN SEARLE

Title REGULATORY AFFAIRS ANALYST

Signature Raleen Searle

Date 06/27/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office _____		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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JUL 01 2003

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

**Application for Permit to Drill
Request for Permit Extension
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

API: 43-047-34565
Well Name: BRENNAN BOTTOM
Location: 1HG-18-7-21
Company Permit Issued to: SHENANDOAH ENERGY INC.
Date Original Permit Issued: 6/11/2002

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

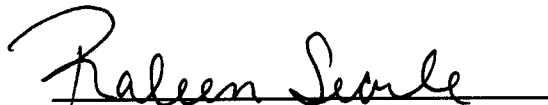
Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐


Signature

6/27/2003

Date

Title: REGULATORY AFFAIRS ANALYST

Representing: SHENANDOAH ENERGY INC.

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JUL 01 2003

DIV. OF OIL, GAS & MINING

006

Designation of Agent/Operator

Merger

ROUTING

1. GLH

2. CDW

3. FILE

The operator of the well(s) listed below has changed, effective:

2/1/2003

FROM: (Old Operator):

TO: (New Operator):

N4235-Shenandoah Energy Inc

N2460-QEP Uinta Basin Inc

11002 E 17500 S

11002 E 17500 S

Vernal, UT 84078-8526

Vernal, UT 84078-8526

Phone: (435) 781-4341

Phone: (435) 781-4341

CA No.

Unit:

WELL(S)

[illegible]

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/2/2003
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/2/2003
3. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/19/2003
4. Is the new operator registered in the State of Utah: YES Business Number: 5292864-0151
5. If **NO**, the operator was contacted **contacted** on:

6. (R649-9-2) Waste Management Plan has been received on:

IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 7/21/2003

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 7/21/2003

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 9/11/2003

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 9/11/2003

3. Bond information entered in RBDMS on: n/a

4. Fee wells attached to bond in RBDMS on: n/a

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: 965-003-032

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: ESB000024

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: 799446

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 965-003-033

2. The **FORMER** operator has requested a release of liability from their bond on: n/a

The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

007

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTSL071745
2. Name of Operator QEP - UINTA BASIN INC		6. If Indian, Allottee or Tribe Name
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078		7. If Unit or CA/Agreement, Name and/or No. BRENNAN BOTTOM
3b. Phone No. (include area code) Ph: 435.781.4309 Fx: 435.781.4329		8. Well Name and No. BRENNAN BOTTOM 1HG-18-7-21
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T7S R21E NENE 702FNL 691FEL		9. API Well No. 43-047-34565
		10. Field and Pool, or Exploratory BRENNAN BOTTOM
		11. County or Parish, and State UINTAH COUNTY, UT

RECEIVED
JUL - 8 2003

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	By	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent		<input type="checkbox"/> Acidize
<input type="checkbox"/> Subsequent Report		<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice		<input type="checkbox"/> Fracture Treat
		<input type="checkbox"/> Production (Start/Resume)
		<input type="checkbox"/> Reclamation
		<input type="checkbox"/> Water Shut-Off
		<input type="checkbox"/> Casing Repair
		<input type="checkbox"/> New Construction
		<input type="checkbox"/> Recomplete
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		<input checked="" type="checkbox"/> Other
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		<input type="checkbox"/> Plug and Abandon
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		<input type="checkbox"/> Convert to Injection
		<input type="checkbox"/> Plug Back

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QEP - Uinta Basin Inc. hereby requests an one year extension on the BB 1HG-17-7-21.

CONDITIONS OF APPROVAL ATTACHED

14. I hereby certify that the foregoing is true and correct. Electronic Submission #23724 verified by the BLM Well Information System For QEP - UINTA BASIN INC, sent to the Vernal	
Name (Printed/Typed) RALEEN SEARLE	Title REGULATORY AFFAIRS ANALYST
Signature <i>Raleen Seale</i>	Date 06/27/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>Kirk Johnson</i>	Petroleum Engineer	Date 10/16/03
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

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NOV 04 2003

UDOGM

DIV. OF OIL, GAS & MINING

QEP- Uintah Basin Inc.
APD Extension

Well: Brennan Bottom 1HG-18-7-21

Location: NENE Sec. 18, T7S, R21E

Lease: U-071745

CONDITIONS OF APPROVAL

An extension for the referenced APD is granted with the following conditions:

1. The extension will expire 6/11/04
2. No other extensions beyond that time frame will be granted or allowed.

If you have any other questions concerning this matter, please contact Kirk Fleetwood of this office at (435) 781-4486



State of Utah

Department of
Natural Resources

ROBERT L. MORGAN
Executive Director

Division of
Oil, Gas & Mining

LOWELL P. BRAXTON
Division Director

OLENE S. WALKER
Governor

GAYLE F. McKEACHNIE
Lieutenant Governor

July 16, 2004

Julie Black
QEP Uinta Basin Inc.
11002 East 17500 South
Vernal, Utah 84078

Re: APD Rescinded – Brennan Bottom Unit 1HG-18-7-21, Sec. 18, T. 7S,
R. 21E, Uintah County, Utah API No. 43-047-34565

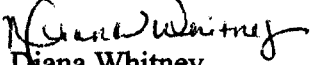
Dear Ms. Black:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 10, 2002. On July 1, 2003, the Division granted a one-year APD extension. On July 14, 2004, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective July 14, 2004.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,


Diana Whitney
Engineering Technician

cc: Well File
Bureau of Land Management, Vernal



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Vernal Field Office
170 South 500 East
Vernal, UT 84078
(435) 781-4400 Fax: (435) 781-4410

<http://www.blm.gov/utah/vernal>



IN REPLY REFER TO:
3160
UT08300

August 19, 2004

Jan Nelson
QEP-Uinta Basin, Inc.
11002 East 17500 South
Vernal, UT 84078

Re: **43.047.34565**
Notification of Expiration
Well No. BB 1HG-18-7-21
NENE, Sec. 18, T7S, R21E
Uintah County, Utah
Lease No. UTU-046
Brennan Bottom Unit

Dear Ms. Nelson:

The Application for Permit to Drill the above-referenced well was approved on June 11, 2002. A one (1) year extension of the original APD was requested. The request was reviewed and the extension approved until June 11, 2004. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Leslie Walker

Leslie Walker
Legal Instruments Examiner

cc: UDOGM

RECEIVED

AUG 23 2004

DIV. OF OIL, GAS & MINING